

What is claimed is:

1. A liquid crystal display apparatus comprising:
a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix form;
and
a driver for dividing one frame into at least four fields and interlace-scanning the at least four fields,
wherein said driver drives the respective fields composing one frame so that a scanning order of the fields is discontinued at least once.
2. The liquid crystal display apparatus claimed in claim 1, wherein said driver drives scanning lines by means of a driving waveform having a reset period for resetting a state of liquid crystals, a selection period for selecting a final display state of the liquid crystals, and a maintaining period for establishing the state selected at the selection period.
3. The liquid crystal display apparatus claimed in claim 1, wherein said driver drives the respective fields so that scanning order thereof is always discontinued.
4. The liquid crystal display apparatus claimed in claim 1, wherein said driver successively scans odd-numbered lines of the respective fields and successively scans even-numbered lines.

5. The liquid crystal display apparatus claimed in claim 1, wherein said driver scans the scanning lines according to the following equation,

$$S = a + nk$$

wherein S is scanning lines to be driven on the respective fields in the plural continued scanning lines divided into plural groups according to a number of fields;

a is variable number, an initial value of which is one, and to which one is added each time when S exceeds the number of fields;

n is variable number, an initial value of which is zero, and to which one is added at every time of scanning on one field, and which returns to the initial value every time when S exceeds the number of fields; and

k is an integer of not less than 2.

6. The liquid crystal display apparatus claimed in claim 1, wherein said liquid crystal display element is constituted so that a plurality of liquid crystal layers are laminated, and the liquid crystal layers are scanned by said driver.

7. The liquid crystal display apparatus claimed in claim 1, wherein the liquid crystals included in said liquid crystal display element have memory property.

8. The liquid crystal display apparatus claimed in claim 7,

wherein said liquid crystals show a cholesteric phase at room temperature.

9. The liquid crystal display apparatus claimed in claim 1, wherein the scanning of next field is started based on reset period end timing of one scanning line of the previous field.

10. A liquid crystal display apparatus, comprising:

a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix pattern; and

a driver for dividing one frame into a plurality of fields and interlace-scanning the plurality of fields,

wherein said driver drives scanning lines by means of a driving waveform having a reset period for resetting a state of liquid crystals, a selection period for selecting a final display state of the liquid crystals, and a maintaining period for establishing the state selected at the selection period, and starts scanning of next field based on reset period end timing of one scanning line of the previous field.

11. The liquid crystal display apparatus claimed in claim 10, wherein said liquid crystal display element is constituted so that a plurality of liquid crystal layers are laminated, and the liquid crystal layers are scanned by said driver.

12. The liquid crystal display apparatus claimed in claim 10,

wherein the liquid crystals included in said liquid crystal display element have memory property.

13. The liquid crystal display apparatus claimed in claim 12, wherein said liquid crystals show a cholesteric phase at room temperature.

2000-01-01 14:00:00